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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,281	10/08/2003	Suresh Pai	EXMA-002	9330

7590 06/29/2006
The Patent Law Office of Frank P. Becking
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EXAMINER

SMITH, TERRI L

ART UNIT PAPER NUMBER

3762

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,281

Applicant(s)

PAI ET AL.

Examiner

Terri L. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-12-04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "SECTION B-B" in Figure 6C as described in the specification. It appears that the reference number "210" is inadvertently obstructing said "SECTION B-B." Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 9 in line 3 the portion of the sentence that reads “with the featured described in” is confusing. It appears that either there are extra words in the phrase or one of the words is the wrong tense.

Appropriate correction is required.

Claim Objections

3. Claims 2, 4, and 7 objected to because of the following informalities: In claim 2, the words “an” and “the” are back to back in line 2. It appears that one of these words is a stray word and should be removed.

In claim 4, it appears that word “in” in line 2 should be a different word (perhaps the word “and”). As written the claim is not clear.

In claim 7, it appears that the word “an” in line 1 should be the word “a.” Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5–10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 5, the phrase “first and second means ...” is vague. It is unclear how these elements are connected to make an apparatus and which means is connected to which heart structure.

In claim 12, “an apparatus” is listed but it is unclear if it is used or needed in the method since it is not used in any method steps. It is suggested to use the apparatus in the “transferring” step.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1–6, 8, 9, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Parravicini, U.S. Patent 4,536,893.

8. Regarding claims 1, 5, and 11–12, Parravicini discloses a first portion adapted to interact with the left ventricle of a heart (column 4, lines 47–48), and a second portion adapted to interact with a blood bearing structure (Fig. 2; column 4, lines 47–48; Examiner is interpreting the right ventricle of the myocardium where 1a is attached to be a blood bearing structure), a second portion being operatively connected with a first portion (column 4, lines 49–55) so that a second portion will cause contraction of a blood bearing structure to assist in driving blood circulation (column 4, lines 56–65). It is inherent that blood will circulate when a ventricular wall of the heart undergoes contraction because the heart is an organ that pumps blood, which is circulated throughout the body (all limitations up to this point are for claim 1); first and second means for transferring force between at least a portion of the heart and the aorta or the pulmonary artery (claim 5) (column 3, lines 1–4; column 4, lines 56–65); positioning an apparatus about at least a portion of the heart (column 1, lines 55–56) and the aorta or the pulmonary artery (claim 11)

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(Fig. 3; column 3, lines 1–4); actuating a portion of the heart (Fig. 4, element 11), and transferring force from a portion of the heart to the aorta or the pulmonary artery, thereby causing contraction of the same to assist in driving blood circulation (column 1, lines 62–65). It is inherent that blood will circulate when a force (in this case compression) is transferred from a portion of the heart to the aorta or the pulmonary artery causing contraction because the heart is an organ that pumps blood which is circulated throughout the body (claim 12).

9. With respect to claims 2, 3, 4, 6, 8, 9, Parravicini discloses a second portion is adapted to at least partially surround the aorta of the circulatory system (claim 2) (column 3, lines 1–3); first and second portions are tensile members (claim 3) (column 2, lines 55–57); first and second portions are fluid filled loops in open to each other (claim 4) (Fig. 2, elements 4a and 4b, fluid-filled chambers); a first means comprises an encircling member adapted to at least partially surround a portion of the left ventricle of a heart (claim 6) (Figs. 2–3; column 1, lines 55–56); a first means comprises a fluid-filled loop adapted to surround at least a portion of the left ventricle of a heart (claim 8) (Fig. 2, element 4b, fluid-filled chamber); a second means comprises an encircling member adapted to at least partially surround at least a portion of the aorta or the pulmonary artery (claim 9) (Fig. 3, element 1a and 3, strap, corresponding to same; column 3, lines 1–4).

10. Claims 1, 2, 4, 5, 6–8, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Arpesella et al., U.S. Patent 5,300,113.

11. Regarding claims 1, 5, and 11–12, Arpesella et al. disclose a first portion adapted to interact with the left ventricle of a heart (Fig. 1, element 1), and a second portion adapted to

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interact with a blood bearing structure (Figs. 3–4, elements 10 and 11), a second portion being operatively connected with a first portion so that a second portion will cause contraction of a blood bearing structure to assist in driving blood circulation (column 4, lines 9–28) (all limitations up to this point are for claim 1); first and second means for transferring force between at least a portion of the heart and the aorta or an atrium of the heart (claim 5) (Figs. 3–4); positioning an apparatus about at least a portion of the heart and the aorta (claim 11) (Figs. 1 and 3–4); actuating a portion of the heart, and transferring force from a portion of the heart to the aorta, thereby causing contraction of the same to assist in driving blood circulation (claim 12) (column 4, lines 9–28).

12. With respect to claims 2, 4, and 6–8, Arpesella et al. disclose a second portion is adapted to at least partially surround the aorta of the circulatory system (claim 2) (Figs. 3–4); first and second portions are fluid filled loops in open to each other (claim 4) (Fig. 2, elements 22 and 23 (single envelopes)); a first means comprises an encircling member adapted to at least partially surround a portion of the left ventricle of a heart (claim 6) (6, ventricular bag); a first means comprises a pair of members adapted to be attached to portions of the left ventricle of a heart (claim 7) (Fig. 1, elements 5 and 6, 1st and 2nd chambers); a first means comprises a fluid-filled loop adapted to surround at least a portion of the left ventricle of a heart (claim 8) (20, single envelope).

13. Claims 1, 2, 4–6, and 8–12 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiu, U.S. Patent 5,429,584.

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14. Regarding claims 1, 5, and 11–12, Chiu discloses a first portion adapted to interact with the left ventricle of a heart (Figs. 1–2 and 4a–4b, element 10 (ventricle cup)), and a second portion adapted to interact with a blood bearing structure (16, aortic jacket), a second portion being operatively connected with a first portion (12, pressure booster) so that a second portion will cause contraction of a blood bearing structure to assist in driving blood circulation (column 6, lines 11–15) (all limitations up to this point are for claim 1); first and second means for transferring force between at least a portion of the heart and the aorta (claim 5) (Figs. 1–2 and 4a–4b); positioning an apparatus about at least a portion of the heart and the aorta (claim 11) (Figs. 1–2 and 4a–4b); actuating a portion of the heart, and transferring force from a portion of the heart to the aorta, thereby causing contraction of the same to assist in driving blood circulation (claim 12) (column 5, line 45–column 6, lines 1–15).

15. Chiu discloses a second portion is adapted to at least partially surround the aorta of the circulatory system (claim 2) (element 16); first and second portions are fluid filled loops in open to each other (claim 4) (Figs. 4a–4b, envelope of 10 (ventricle cup) and 30 (balloon)); a first means comprises an encircling member adapted to at least partially surround a portion of the left ventricle of a heart (claim 6) (Figs. 4a–4b); a first means comprises a fluid-filled loop adapted to surround at least a portion of the left ventricle of a heart (claim 8) (Figs. 4a–4b, envelope of 10 (ventricle cup)); a second means comprises an encircling member adapted to at least partially surround at least a portion of the aorta (claim 9) (element 16, aortic jacket); a second means comprises a fluid-filled loop adapted to surround at least a portion of the aorta (claim 10) (30, balloon).

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Conclusion

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Terri L. Smith whose telephone number is 571-272-7146. The Examiner can normally be reached on Monday - Friday, between 7:30 a.m. - 4:00 p.m..

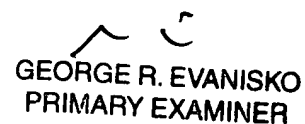
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



TLS
June 23, 2006

23 June 2006



GEORGE R. EVANISKO
PRIMARY EXAMINER

6/23/6